Cpy to (Mike), Norm

CH2M HILL

FAX TRANSMITTAL REQUEST FORM
FOR IMMEDIATE DELIVERY

DATE: 26 February 1992

PROJECT NUMBER: PDX30702.PA.NP

FAX OPERATOR: _____

TIME SENT: _____ ☐ AM ☐ PM

TO: Pat Young and Norman Lovelace **OFFICE:**

FIRM NAME: USEPA

CITY: San Francisco **STATE:** CA **COUNTRY:** USA

Fax Phone Number: 415-744-1604 **Verification Phone Number:** 7441591

Total number of pages, including this page: 6 **Return original?:** ■ YES ☐ NO

From: Steve Costa **Office:** SFO **Employee No.:** 5932

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REMARKS:

Pat,

FYI: material sent to Doug Liden re: Samoa Packing flow limitations. Please copy Norman Lovelace. Give me a call if you have any questions

Thanks, Steve

Doug,

Attached is a quick analysis of Samoa Packing DAF performance based on the data I had immediately available. It shows a strong case for increasing flows to at least 0.72mgd. If you have any questions please give me a call.

Regards,

Steve

Date Fax Received: _____ Time: _____ ☐ AM ☐ PM

CH2M HILL

MEMORANDUM

TO: Doug Liden/USEPA

COPIES: James Cox/Van Camp Seafood
Pat Young/USEPA
Norman Lovelace/USEPA
Sheila Wiegman/ASEPA

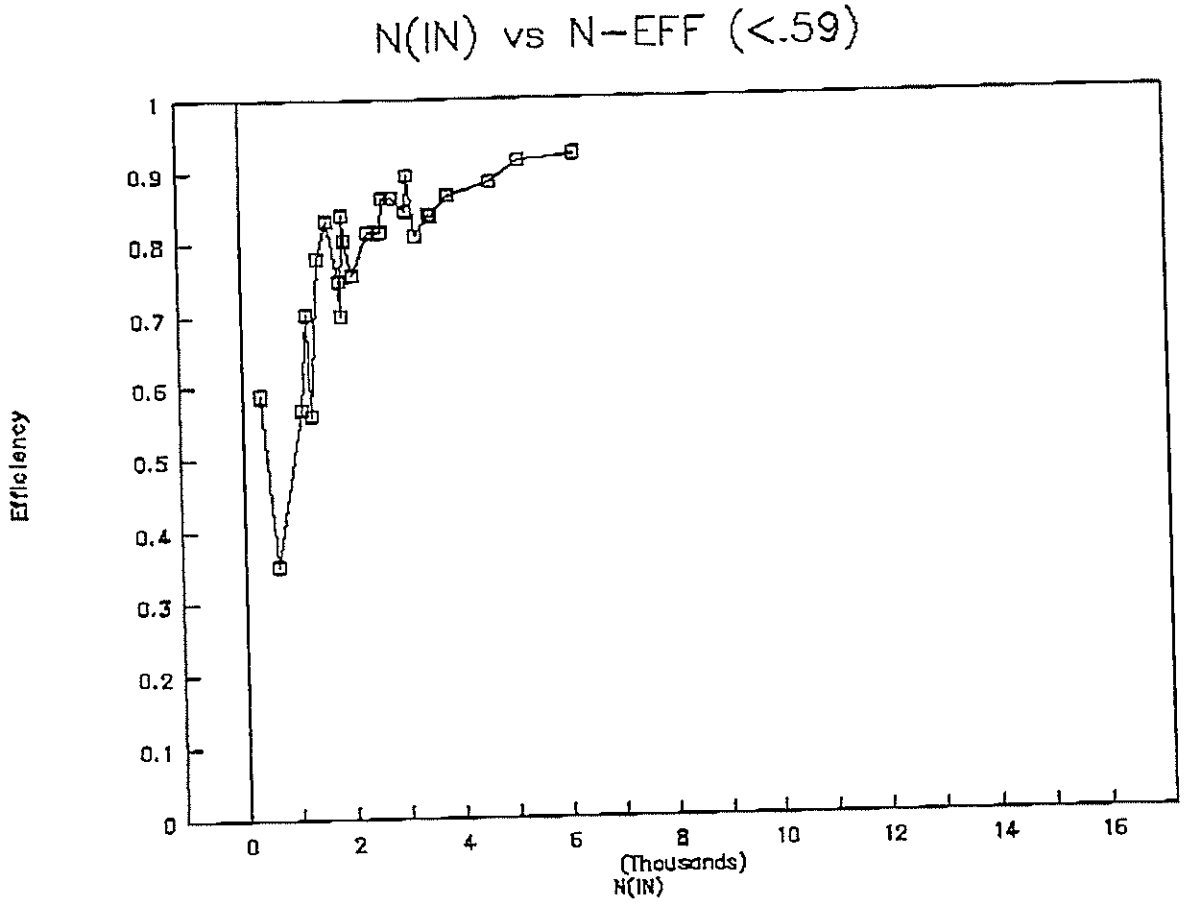
FROM: Steve Costa/CH2M HILL

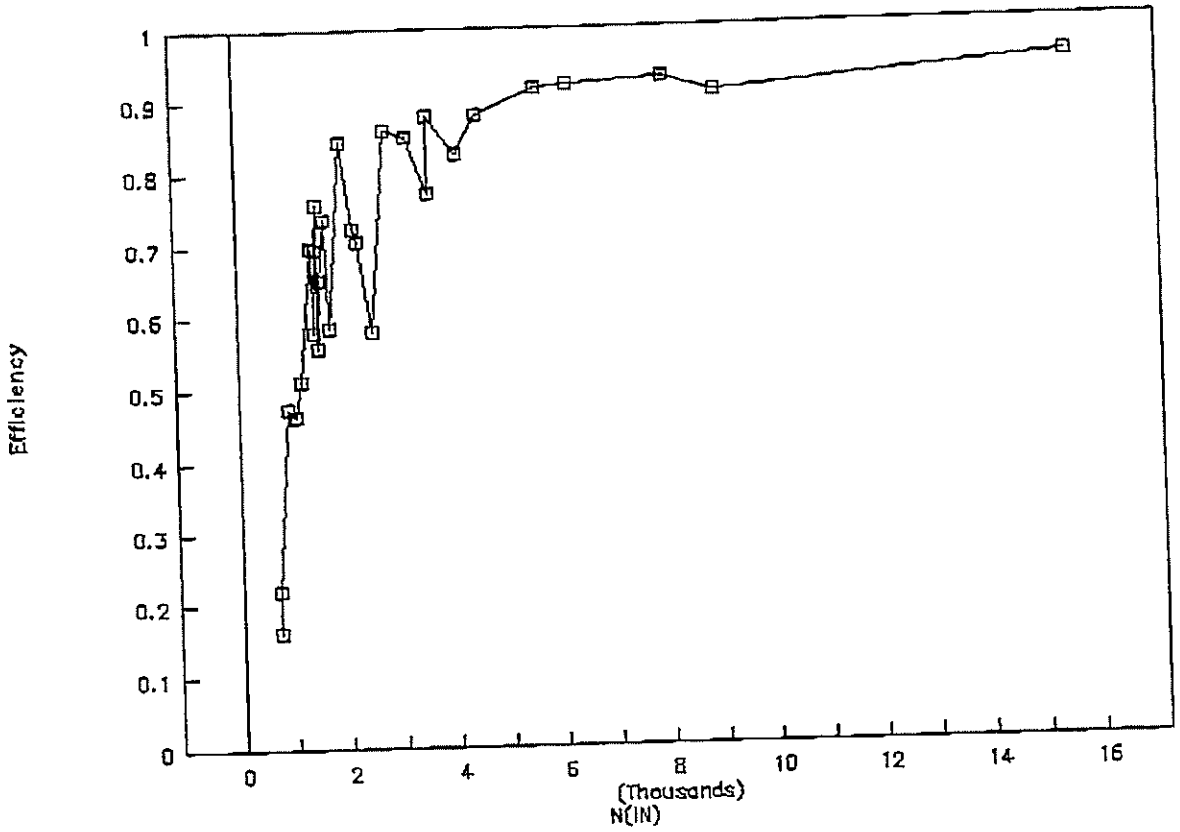
DATE: 24 February 1992

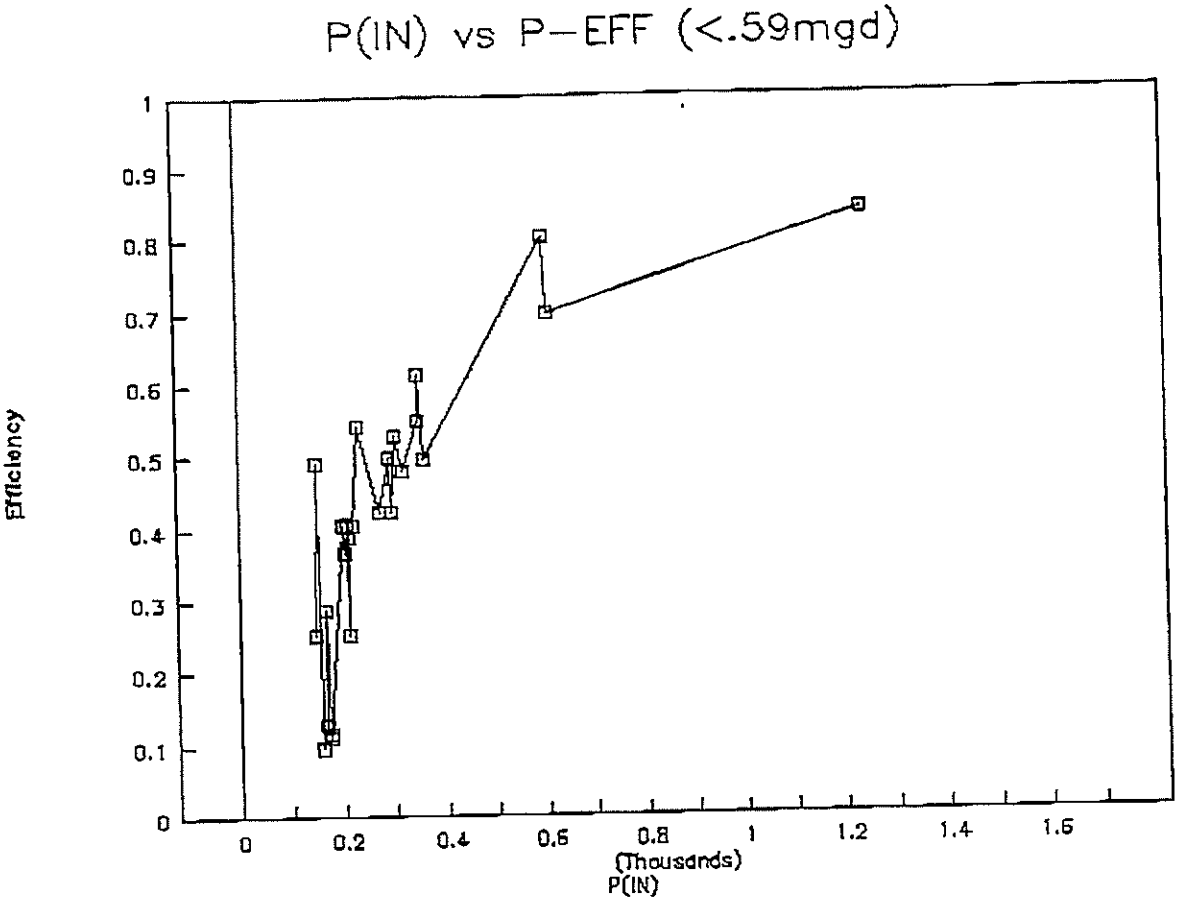
SUBJECT: Flow limitations for Samoa Packing Co.

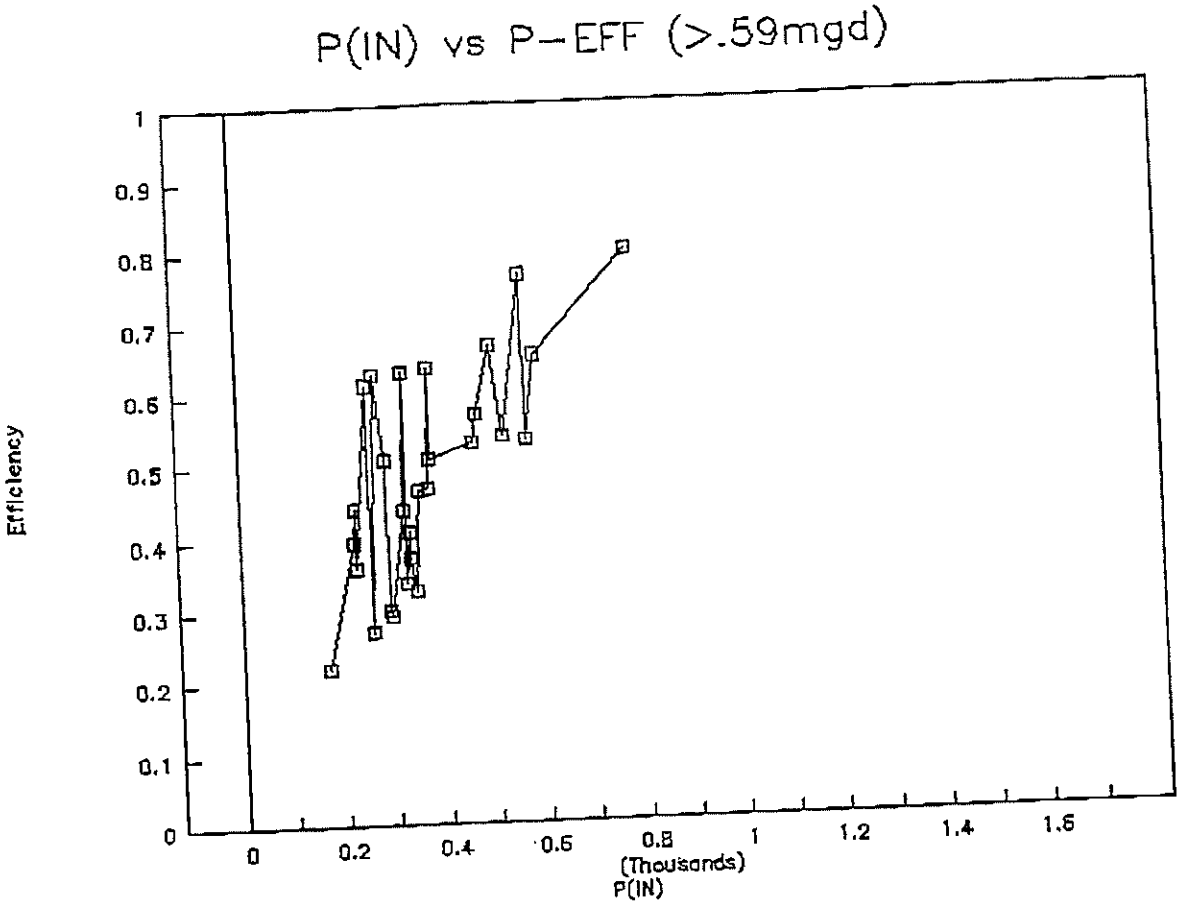
PROJECT: Joint Cannery Outfall, Pago Pago, American Samoa

I have reviewed the nitrogen, phosphorous, and flow data for Samoa Packing operations for the period of August 1990 through March 1991. The purpose of the review was to determine the effect of flow rate on DAF operational characteristics. I separated the data set into two subsets: flow rates at or below 0.59 mgd and above 0.59 mgd. I then plotted percent removal of nitrogen as a function of influent (to DAF) nitrogen loading (pounds/day) and percent removal of phosphorus as a function of influent phosphorus loading (pounds/day). These plots are attached. Comparison of the removal efficiency for the two ranges of flow rates indicates that there is no significant difference for the two flow ranges. Based on the data reviewed, there does not appear to be any rationale for limiting the flow rate to 0.59 mgd because of operational constraints of the DAF unit. Flows up to at least 0.72 appear to be consistent with the operation and design of the unit.


N(IN) vs N-EFF (<.59)
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
2
4
6
8
10
12
14
16
(Thousands)
N(IN)


N(IN) vs N-EFF (>.59)
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
2
4
6
8
10
12
14
16
(Thousands)
N(IN)


P(IN) vs P-EFF (<.59mgd)
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
(Thousands)
P(IN)


P(IN) vs P-EFF (>.59mgd)
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
(Thousands)
P(IN)